

LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-67 (cancelled).

68. (previously presented) A method for treating or inhibiting a disease of an animal, said disease caused by a microorganism, comprising administering to said animal an effective amount of an antimicrobial preparation comprising a substantially pure culture or suspension of *Burkholderia casidae* or variant thereof, a cell-free filtrate or cell fraction prepared from a substantially pure culture or suspension of *Burkholderia casidae* or variant thereof, or a cell-free filtrate or cell fraction prepared from an inactivated substantially pure culture or suspension of *Burkholderia casidae* or variant thereof, which antimicrobial preparation exhibits antimicrobial activity against the microorganism, and the *Burkholderia casidae* or variant has

- a) a 16S rRNA gene comprising a sequence that is at least 97% similar to the sequence of SEQ ID NO:1 as determined by Clustal Analysis; and
- b) a cellular fatty acid composition comprising about 16% to about 20% C16:0 fatty acid, about 18% to about 22% C16:1 fatty acid, and about 35% to about 45% C18:1 (11, 12) fatty acid,

and wherein the microorganism is a bacterium, yeast, fungus, protozoan or alga.

69. (previously presented) The method of claim 68, wherein the animal is human.

70. (currently amended) The method of claim 68, wherein the bacterium is ~~Agromyces, Arthrobacter, Micrococcus luteus, Mycobacterium, Nocardia, Staphylococcus aureus or Streptomyces~~ Agromyces, Arthrobacter, Micrococcus luteus, Mycobacterium, Nocardia, Staphylococcus aureus or Streptomyces.

71. (currently amended) The method of claim 68, wherein the yeast is ~~Saccharomyces cerevisiae, Candida albicans or Cryptococcus neoformans~~ Saccharomyces cerevisiae, Candida albicans or Cryptococcus neoformans.

72. (currently amended) The method of claim 68, wherein the fungus is ~~Agaricus, Alternaria, Aspergillus niger, Botrytis cinerea, Candida, Cercospora, Cercosporidium, Cryptococcus, Geotrichum, Mycosphaerella, Mucor, Penicillium, Phoma, Phytophthora,~~

~~Plasmopora, Pseudopeziza, Puccinia, Pythium, Rhizoctonia, Rhizopus, Saccharomyces, Septoria nodorum, Sporothrix, Stemphylium, Trichophyton or Verticillium~~ Agaricus, Alternaria, Aspergillus niger, Botrytis cinerea, Candida, Cercospora, Cercosporidium, Cryptococcus, Geotrichum, Mycosphaerella, Mucor, Penicillium, Phoma, Phytophthora, Plasmopora, Pseudopeziza, Puccinia, Pythium, Rhizoctonia, Rhizopus, Saccharomyces, Septoria nodorum, Sporothrix, Stemphylium, Trichophyton or Verticillium.

73. (currently amended) The method of claim 68, wherein the alga is ~~Anabena~~ Anabena.

74. (previously presented) The method of claim 68, wherein the *Burkholderia casidae* or variant has a 16S rRNA gene comprising a sequence identical to the sequence of SEQ ID NO:1 as determined by Clustal Analysis; and a cellular fatty acid composition comprising about 18% C16:0 fatty acid, about 21% C16:1 fatty acid, and about 39% C18:1 (11, 12) fatty acid.

75. (previously presented) The method of claim 68, wherein the *Burkholderia casidae* is strain 2.2N having the accession number ATCC 55961, or a variant thereof.

76. (previously presented) The method of claim 68, wherein the substantially pure culture or suspension of *Burkholderia casidae* or variant thereof comprises at least 80% cysts.

77. (previously presented) The method of claim 68, wherein the substantially pure culture or suspension of *Burkholderia casidae* or variant thereof comprises at least 80% cells.

78. (previously presented) The method of claim 68, wherein the substantially pure culture or suspension of *Burkholderia casidae* or variant thereof has been inactivated.

79. (previously presented) The method of claim 68, wherein the substantially pure culture or suspension of *Burkholderia casidae* or variant thereof has been inactivated by treating with heat or alcohol.

80. (previously presented) The method of claim 68, wherein the substantially pure culture or suspension of *Burkholderia casidae* or variant thereof comprises sprayed-dried or freeze-dried cells.

81. (previously presented) The method of claim 68, wherein the cell-free filtrate or cell fraction is extracted by alcohol.

82. (previously presented) The method of claim 81, wherein the alcohol-extracted cell-free filtrate or cell fraction is prepared by a method comprising:

- a) boiling an alcoholic mixture comprising a cell, a culture, a suspension, a cell-free filtrate or a cell fraction of *Burkholderia casidae* and an alcohol;
- b) clarifying the boiled mixture;
- c) mixing the boiled mixture with magnesium silicate;
- d) collecting the magnesium silicate;
- e) washing the magnesium silicate with water; and
- f) eluting antifungal compounds from the magnesium silicate with an alcoholic solution, thereby producing the alcohol-extract.

83. (previously presented) A method for treating or inhibiting a disease of an animal, said disease caused by a microorganism, comprising administering to said animal an effective amount of an antimicrobial preparation from *Burkholderia casidae* or variant thereof, which antimicrobial preparation exhibits antimicrobial activity against the microorganism and is produced by a method comprising:

- a) growing cells of *Burkholderia casidae* or variant in a Tryptic Soy Broth with sucrose (TSM+S) medium;
- b) separating the medium from the cells;
- c) filter-sterilizing the cell-free medium; and
- d) mixing the filter-sterilized medium with a carrier,

wherein the microorganism is a bacterium, yeast, fungi, protozoan or algae.

84. (previously presented) A method for treating or inhibiting a disease of an animal, said disease caused by a microorganism, comprising administering to said animal an effective amount of an antimicrobial preparation from *Burkholderia casidae* or variant thereof, which antimicrobial preparation exhibits antimicrobial activity against the microorganism and is produced by a method comprising:

- a) growing cells of *Burkholderia casidae* or variant in a Tryptic Soy Broth with sucrose (TSM+S) medium;
- b) separating the medium from the cells;

- c) spray-drying the cells; and
- d) mixing the dried cell material with a carrier,

wherein the microorganism is a bacterium, yeast, fungi, protozoan or algae.

85. (previously presented) A method for treating or inhibiting a disease of an animal, said disease caused by a microorganism, comprising administering to said animal an effective amount of an antimicrobial preparation from *Burkholderia casidae* or variant thereof, which antimicrobial preparation exhibits antimicrobial activity against the microorganism and is produced by a method comprising:

- a) growing cells of *Burkholderia casidae* or variant in a Tryptic Soy Broth with sucrose (TSM+S) medium;
- b) separating the medium from the cells;
- c) filter-sterilizing the cell-free medium;
- d) extracting antimicrobial compounds from the filtered-sterilized medium
- e) using organic or alcoholic solvents; and
- f) mixing the cell-free medium with a carrier,

wherein the microorganism is a bacterium, yeast, fungus, protozoan or alga.